Controls and Dynamics Branch (RIC)

Conducts research in the areas of intelligent control, health management and dynamic modeling. Goal is to enhance the safety, environmental compatibility, capability and affordability of aerospace systems with emphasis on propulsion systems. Current technology development efforts include; active control of turbomachinery components such as compressors, combustors, and turbine clearance algorithm and software development for diagnostics and prognostics; and dynamic models of advanced propulsion system concepts such as wave rotors and pulse detonation engines. Work is supported by an extensive computer-aided control design and evaluation capability and by various experimental facilities located at Glenn Research Center.